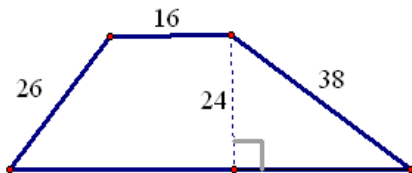
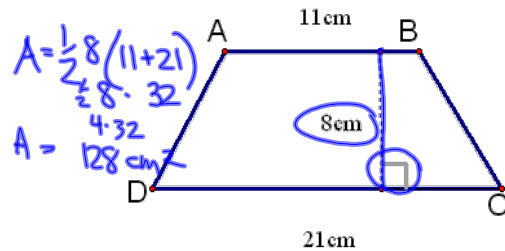


8-6 Area of Trapezoids

$$A = \frac{1}{2} h (b_1 + b_2)$$



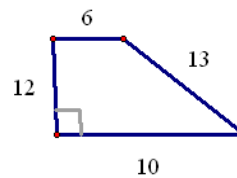
$$A = \frac{1}{2} h (b_1 + b_2)$$

$$\frac{1}{2} \cdot 24 \cdot (16 + 56)$$

$$\frac{1}{2} \cdot 24 \cdot 72$$

$$A = 12 \cdot 72$$

$$A = 864 \text{ u}^2$$



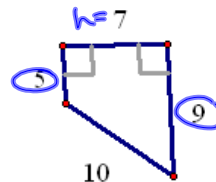
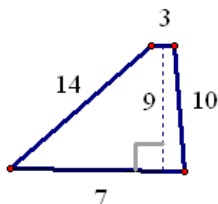
$$A = \frac{1}{2} h (b_1 + b_2)$$

$$\frac{1}{2} \cdot 12 \cdot (6 + 10)$$

$$\frac{1}{2} \cdot 12 \cdot 16$$

$$A = 12 \cdot 8$$

$$A = 96 \text{ u}^2$$



$$A = \frac{1}{2} \cdot 7 \cdot (5 + 9)$$

$$\frac{1}{2} \cdot 7 \cdot 14$$

$$A = 7 \cdot 7$$

$$A = 49 \text{ u}^2$$

$$A = 50 \text{ cm}^2$$

$$b_1 = 7 \text{ cm}$$

$$b_2 = 13 \text{ cm}$$

$$h =$$

$$A = \frac{1}{2} h (b_1 + b_2)$$

$$50 = \frac{1}{2} h (7 + 13)$$

$$\frac{1}{2} h \quad 20$$

$$50 = 10h$$

$$50h = h$$

$$A = 12 \text{ cm}^2$$

$$b_1 = 10 \text{ cm}$$

$$b_2 = 6 \text{ cm}$$

$$h =$$

$$12 = \frac{1}{2} h (16)$$

$$\frac{12}{8} = \frac{8h}{8}$$

$$1.5 \text{ cm} = h$$

$$A = 39 \text{ cm}^2$$

$$b_1 = 8 \text{ cm}$$

$$b_2 =$$

$$h = 6 \text{ cm}$$

$$A = \frac{1}{2} h (b_1 + b_2)$$

$$39 = \frac{1}{2} 6 (8 + b)$$

$$\frac{39}{3} = \frac{3(8+b)}{3}$$

$$13 = 8 + b$$

$$-8 \quad -8$$

$$5 \text{ cm} = b$$

DO:

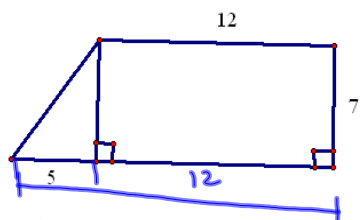
$$A = 84 \text{ cm}^2$$

$$b_1 = 9 \text{ cm}$$

$$b_2 = 15 \text{ cm}$$

$$h =$$

Given the trapezoid, what is the height, base 1 and base 2?



$$h = 7 \quad b_1 = 12 \quad b_2 = 17$$

HW

p448-449

1-13, 18-22